



The Continuing Retirement Savings Crisis

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ABSTRACT

With the Baby Boom generation beginning to retire, more emphasis has recently focused on Americans' financial security in retirement. Most recent studies show that many Americans are ill-prepared for retirement, and that they are highly anxious about their ability to retire. The financial crisis of 2007-2008 was a huge setback for households. Since then, the combined value of 401(k) accounts and IRAs increased to a record high of \$11.3 trillion at the end of 2013. Does this translate to improved retirement security for average American households? Unfortunately, the answer is no: the typical American household was further behind in retirement readiness in 2013 than in 2010 and 2007. This report, an update of a previous NIRS report published in 2013¹, examines the readiness of working-age households, based primarily on an analysis of the 2013 Survey of Consumer Finances (SCF) from the U.S. Federal Reserve. The study analyzes workplace retirement plan coverage, retirement account ownership, and household retirement savings as a percentage of income, and estimates the share of working families that meet financial industry recommended benchmarks for retirement savings.

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1. Introduction

With the Baby Boom generation beginning to retire, more emphasis has recently focused on Americans' financial security in retirement. Most recent studies show that many Americans are ill-prepared for retirement, and that they are highly anxious about their ability to retire². In a recent survey of Americans' views on retirement security nearly 6 out of 10 strongly agreed that America is facing a retirement crisis.³

Over the past several decades, more and more private sector employers have shifted away from traditional defined benefit (DB) pensions, retirement plans that provide a guaranteed, monthly income stream that cannot be outlived, and are managed by professionals. These plans have been replaced with defined contribution (DC) plans, such as 401(k) plan accounts, in which the risk and much of the funding burden falls on individual employees, who tend to have difficulty contributing enough on their own, who typically lack investment expertise, and who may have difficulty figuring out how to spend down their nest egg in retirement. At the same time, the national public policy debate is focused on proposals to reduce the benefits provided by Social Security, which serves as the primary foundation of retirement income security for most Americans and provides a critical bulwark against old-age poverty.

The catastrophic financial crisis of 2008 exposed the vulnerability of the new DC-centered retirement system. Americans saw the value of their hard-earned nest eggs plummet when the financial markets crashed and destroyed trillions of dollars of household wealth. Since then, the combined value of 401(k) accounts and IRAs increased to a record high of \$11.3 trillion at the end of 2013. Unfortunately, this did not translate to improved retirement security for the majority of American families. In fact, the typical American household did not gain much ground in retirement readiness in 2013 compared to 2010 and 2007, and lost ground by some measures. There is strong evidence that slow employment and wage growth, combined with rising inequality, have further eroded median family income and made it more challenging than ever to save for retirement—and that the retirement crisis is getting worse.⁴

In this uncertain environment, working families face an ongoing quandary: how much income will they need to retire, and will they ever have enough? To maintain its standard of living in retirement, the typical working American household needs to replace roughly 85 percent of pre-retirement income.⁵ This replacement rate may seem high, but it does not fully account for medical costs which can escalate rapidly during retirement.⁶ Social Security,

under the current benefit formula, provides a replacement rate of roughly 35 percent for a typical household. This leaves a retirement income gap equal to 50 percent of pre-retirement earnings that must be filled through other means.

For a shrinking percentage of families, a portion of the retirement income needed left after accounting for Social Security will be closed by a DB pension. Most families, however, must rely primarily on their own investments through an employer-sponsored plan such as a 401(k) if available or, if not, an Individual Retirement Account (IRA), and other forms of private wealth.⁷ Financial experts suggest targets of 8-11 times income in retirement assets in order to replace 85 percent of pre-retirement income. Since the 2008 crisis, some experts have begun to recommend a contribution rate of 15 percent of pay—rather than the previous 10 percent—over a 40-year career in order to meet this target.⁸

This is a hefty savings burden, one that the vast majority of households have not been able to meet.⁹ The magnitude of this crisis is considerably worse than many realize. For instance, a commonly cited statistic is the average 401(k) balance of \$100,000—or higher, depending on the source—for households near retirement age.¹⁰ Not only is this sum inadequate to provide meaningful income security for the typical household; it also only counts those that own retirement accounts in the first place.

This report examines the readiness of *all* working-age households, based primarily on the authors' analysis of the 2013 Survey of Consumer Finances (SCF) from the U.S. Federal Reserve.¹¹ This report analyzes workplace retirement plan coverage, retirement account ownership, and retirement savings as a percentage of income among U.S. households age 25-64. The report also estimates the magnitude of the shortfall in working families' savings compared to financial industry recommended benchmarks. The study is organized as follows:

- Section I summarizes historical and generational trends in access to and participation in employer-sponsored retirement plans, which remain the primary vehicle for tax-advantaged retirement wealth accumulation for workers.
- Section II examines rates of household participation in DC retirement accounts—including employer-sponsored, 401(k) type plans or private retirement accounts like traditional and Roth Individual Retirement Arrangements (IRAs)—and identifies differences by income and wealth.

- Section III estimates the share of working families that do not meet financial industry recommended benchmarks for retirement savings.
- Section IV explores the policy implications of these findings, focusing on Social Security, access to retirement savings vehicles, and lower-income households' ability to save.

We then discuss key findings and conclude.

i. Lower Coverage, Less Security: Employer-Sponsored Retirement Plans

Employer-sponsored retirement plans remain the most important vehicle for providing retirement income among working households after Social Security. However, a large share of American workers lack access to an employer-sponsored retirement plan through their employer. Those who do participate in a retirement plan are much likely to be enrolled in an individual 401(k) type account rather than a group DB pension. DC plans like 401(k)s offer the advantage of portability for a mobile labor force, but place all of the investment risk and most (if not all) of the contribution burden on individual workers. In traditional DB plans, employers bear the investment risk and primary funding responsibility, assets are usually managed by professionals, and workers benefit from secure monthly income that lasts through retirement. Because they are pooled, DB pensions provide significantly higher retirement income than DC plans for the same contribution rate.¹²

In this section, we analyze worker and household level participation in employer sponsored retirement plans, drawing on the U.S. Bureau of Labor Statistics' Current Population Survey (CPS)¹³ and the SCF. We find declining access to workplace retirement benefits at the worker and household level, a decline in DB coverage and increase in DC coverage among households that participate in workplace plans since the late 1990s, and a resulting generation gap in which younger households are half as likely to be covered by a DB pension through their workplace as those near retirement.

Figure 1 illustrates historical trends in access to employer-sponsored retirement benefits, whether DB or DC, among private sector wage and salary employees age 25-64 based on an analysis of the CPS. "Access" denotes working for an employer that sponsors a retirement plan of some kind, regardless of whether an individual worker qualifies or participates.

Figure 1:
Only 55 Percent of Private Sector Workers Have Access to a Retirement Plan at Work

Private sector wage and salary workers age 25-64 whose employers sponsor a retirement plan, 1979-2013



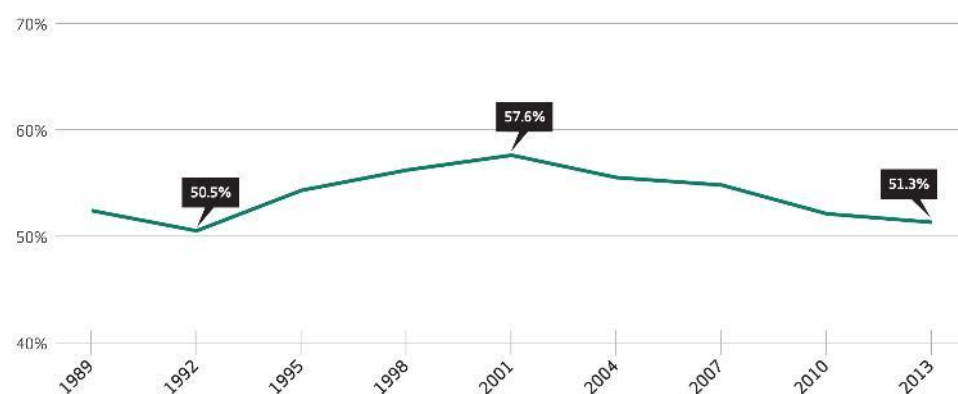
Source: Authors' analysis of CPS.

The percentage of workers whose employers sponsored a retirement plan declined during the 1980s, to 54 percent in 1988. Workplace retirement plan access increased during the next decade—particularly the mid to late 1990s when economic growth and low unemployment lifted wages across the board—reaching 62 percent in 1999-2001. Access dropped steeply in the aftermath of the 2001 recession and then again after 2008 financial collapse. In 2013, access finally started to increase, after more than a decade of decline, to nearly 55%. However, this still means that over 45 percent—some 43.3 million individuals—worked for an employer that did not sponsor a retirement plan in 2013. Even among full-time employees in the same age group, 42 percent—or 34.4 million—had no access.

Workers who lack access to an employer-sponsored retirement plan tend to work for smaller firms, and to be low- to middle-wage employees.¹⁴ Large firms generally offer more generous benefits. For example, in 2014, 46 percent of workers in firms with 500 or more employees had access to a DB pension.¹⁵ Small businesses—which account for approximately two-thirds of workers that lack access to a retirement plan—often find it too expensive and complicated set up any kind of retirement plan. In addition, earnings levels make a difference; firms that employ high-wage labor tend to offer at least a 401(k) type benefit with matching contributions as a recruitment tool, and those small businesses that offer a retirement plan tend to fall into this category. Small and large employers in low-wage industries are less likely to offer a retirement plan.

Figure 2: Only 51 Percent of Working-Age Households Participate In Workplace Retirement Plans

Employer-sponsored retirement plan coverage among households with heads age 25-64, 1989-2013

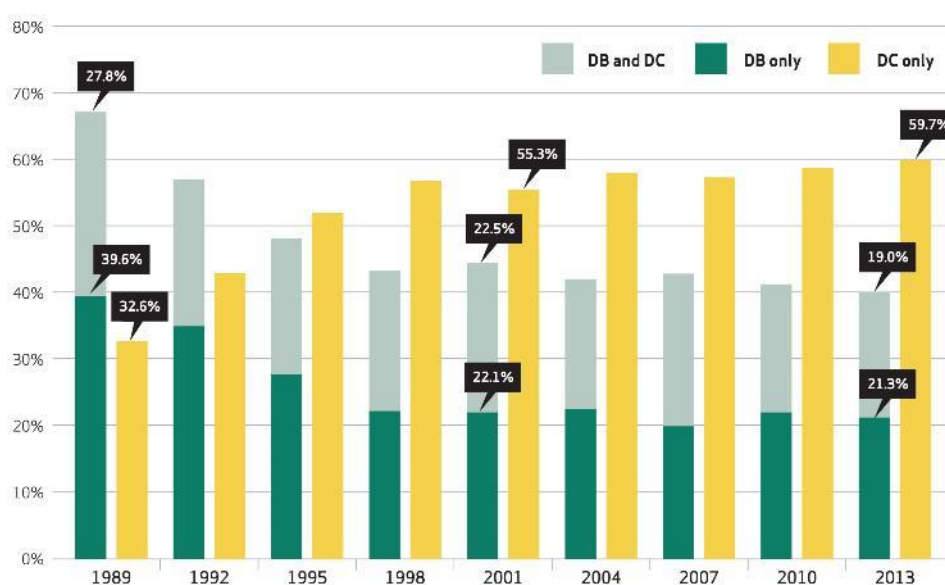


Source: Authors' analysis of SCF, various years.

The trend toward declining access over the past decade in the private sector, which accounts for most employment, is also reflected at the household level (Figure 2). The share of working-age households in which the head or spouse reported *participating* in—not just having access to—a workplace retirement plan peaked in the 2001 SCF and has declined since. Consequently, the share of U.S. working families in which either the head of household or the spouse participated in a retirement plan through their job decreased from 57.6 percent in 2001 to 51.3 percent in 2013.

Figure 3: Six out of Ten Households Covered by a Workplace Retirement Plan Have Only a 401(k) Type Benefit

DB and DC plan participation among households covered by an employer-sponsored retirement plan, 1989-2013

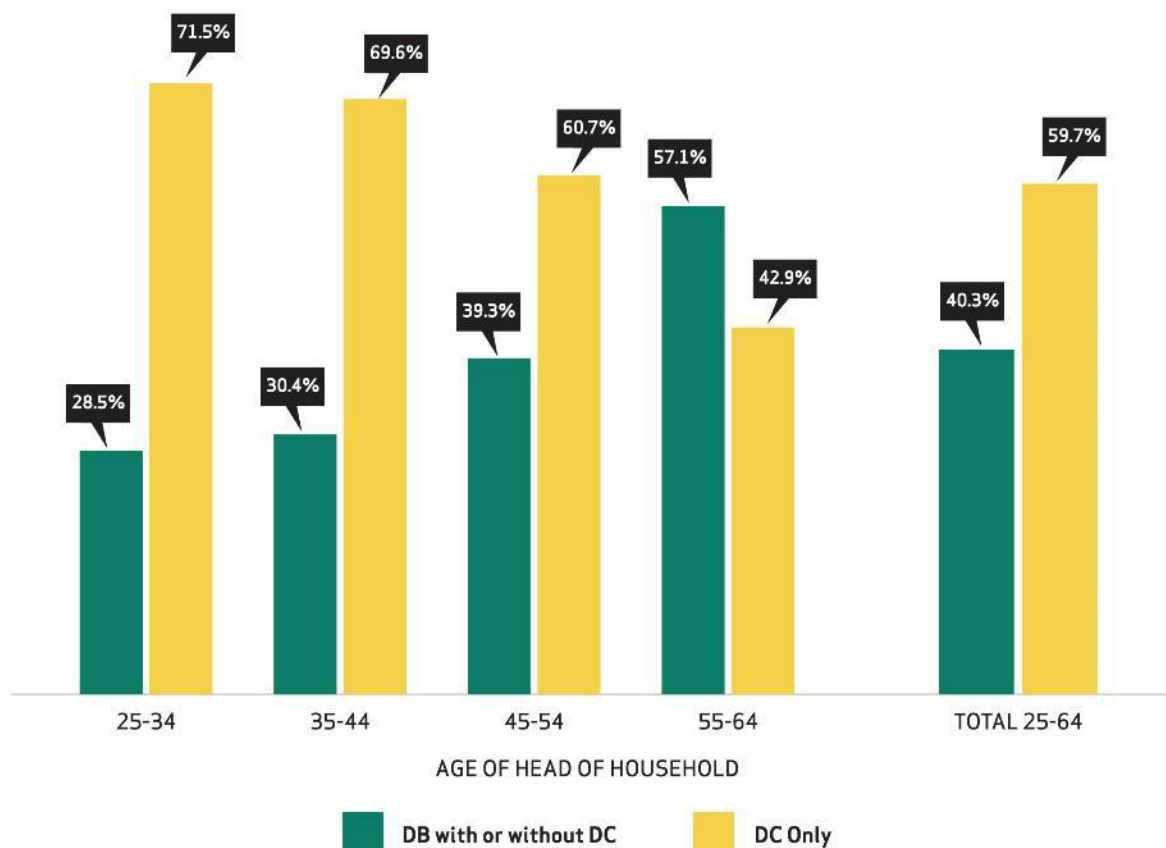


Source: Authors' analysis of 2013 SCF. Universe is households with heads age 25-64 in which the head or spouse is covered by a retirement plan through their current job.

While a shrinking percentage of households participating in workplace retirement plans, the retirement income security provided by such plans has also diminished. Among working-age households in which the head or spouse participated in an employer-sponsored retirement plan through a current job, the share that had a DB pension—whether alone or with a DC account—declined rapidly from 67 percent in 1989 to 43 percent in 1998 (Figure 3). Conversely, the share of participating households that only had a DC plan grew from 33 to 57 percent during the same period. The decline in DB pensions and the increase in DC plans has continued since 1998, albeit more slowly. In 2013, 40 percent of households participated in a DB plan through a job held by the head and/or spouse, and 60 percent participated in only a DC plan.

Figure 4: Young Households with Workplace Retirement Benefits Are Half as Likely as Near-Retirement Households to Have a DB Pension

DB and DC plan coverage among households covered by an employer-sponsored retirement plan, by age of head of household, 2013



Source: Authors' analysis of 2013 SCF. Universe is households with heads age 25-64 in which the head or spouse is covered by a retirement plan through their current job.

Households currently near retirement represent the last generation of workers to enjoy widespread DB pension coverage, and as the Baby Boom generation continues to retire, the share of near-retirement households with DB pensions continues to decline, as illustrated in Figure 4. Among households covered by workplace retirement benefits, a majority (57 percent) of older households age 55-64 are covered by a DB pension. This age group saw a 3 percentage point decline in coverage since 2010. Younger households are half as likely to have a DB pension than older households—29 percent for age 25-34 and 30 percent for age 35-44.

This trend away from DB plans has had profound implications for the retirement income security of working households. When the federal law creating 401(k) plans was originally passed in 1978, they were intended to supplement—not replace—DB pensions. These 401(k) plans have the advantage of portability and faster vesting of benefits, compared to traditional DB pensions in which workers usually must wait several years to vest, and where benefits are tied to a single employer or group of employers. However, it is widely recognized that 401(k)s also expose workers to a host of risks that they are ill-equipped to bear as individuals: inadequate contributions, poor investment choices, financial market volatility, and outliving their retirement savings.

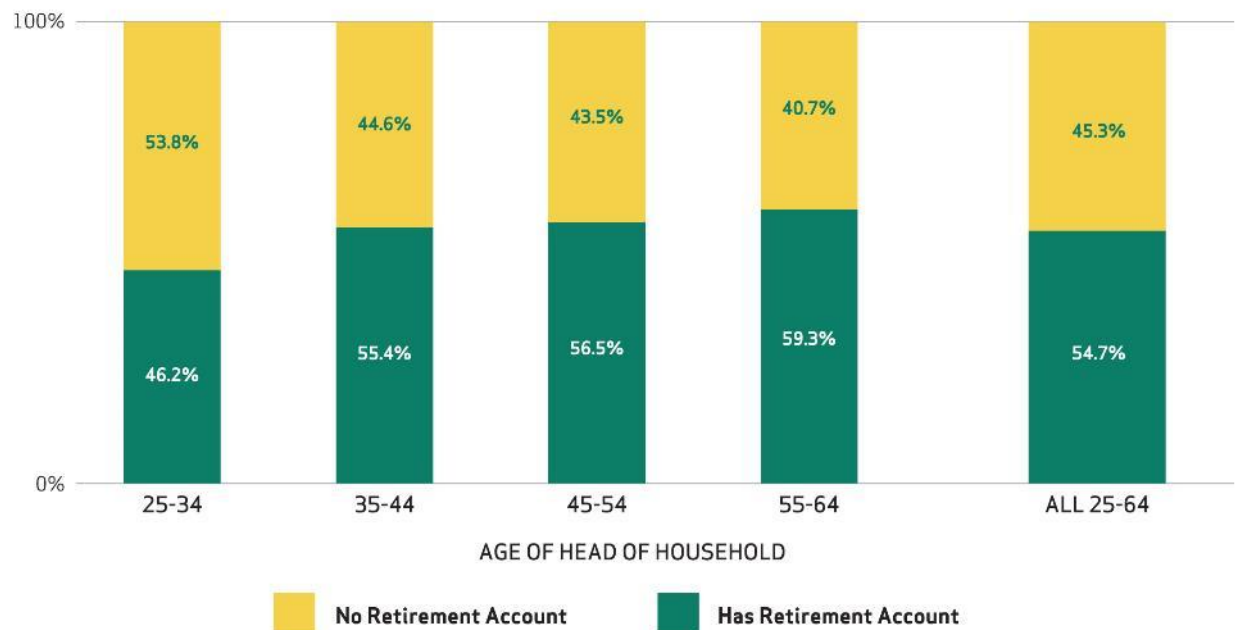
The following section will examine how American working-age families are faring in wealth accumulation in the DC-centered retirement system.

ii. Marked Disparities: Retirement Account Ownership

A large share of U.S. working-age households do not own any retirement account assets, and retirement account asset ownership rates are characterized by marked disparities according to income and wealth.¹⁷ This section examines rates of participation in retirement accounts among working-age households. Retirement accounts include both employer-sponsored plans like 401(k)s, 403(b)s, 457(b)s, SEP IRAs, and Simple IRAs, and private retirement accounts like traditional IRAs and Roth IRAs. They do not include DB pensions.¹⁸ This section also draws out key socioeconomic distinctions between households that own at least one retirement account and those with no assets held in a retirement account. For the purposes of this analysis, a household is considered to own a retirement account if its total retirement account assets are greater than zero, consistent with the Federal Reserve's analysis of SCF retirement accounts data.¹⁹

Figure 5: Over 45 Percent of all Working-Age Households Do Not Own Assets in a Retirement Account

Household retirement account ownership by age of head of household, 2013



Source: Authors' analysis of 2013 SCF.

Table 1: 39.6 Million Working-Age Households Do Not Own Assets in a Retirement Account

Number of households without retirement account assets, 2013

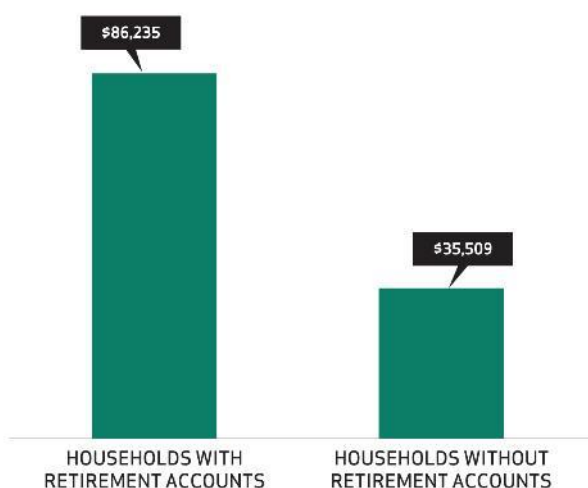
Age of Head	Number of Households (millions)
25-34	10.4
35-44	9.4
45-54	10.5
55-64	9.3
Total 25-64	39.6

Source: Authors' analysis of 2013 SCF.

Figure 5 shows retirement account ownership rates among working-age households by age group. Significantly, a large share of households lack retirement account assets: 45 percent of all working-age households, and 41 percent of near-retirement households.²⁰ All told, nearly 40 million working-age households in the U.S. do not have retirement account assets (Table 1).

Figure 6: Households with Retirement Accounts have 2.4 Times the Income of Households without Retirement Account Assets

Median income among working-age households by retirement account ownership status, 2013



Source: Authors' analysis of 2013 SCF. Universe is households with heads age 25-64. Retirement account ownership status reported for 2013; income data reported for 2012. Those with negative earnings excluded. See Appendix for detailed methodology.

While there is a notable gap between older and younger households in retirement account ownership—46 percent among households age 25-34 versus 59 percent among households age 55-64—the participation gap is much wider across income groups (Figure 5). To begin, households with retirement accounts have a median income of \$86,235, compared to \$35,509 among households without retirement accounts—2.4 times as large (Figure 6).

Figure 7 shows the retirement account asset ownership of households by income quartile. (See Appendix for methodology.) The vast majority (90 percent) of households in the top income quartile own retirement account assets, as do 76 percent of the third (second-highest) income quartile. In comparison, 51 percent of the second-lowest income quartile and only 21 percent of households in the bottom income quartile own retirement account assets. In other words, retirement accounts are sharply concentrated in the top half of the income distribution. In addition, this retirement account ownership disparity has increased since 2010, when 90 and 72 percent of those in the highest two quartiles owned an account, versus 26 percent in the lowest quartile.²¹

While private saving has always played an important role in retirement, changes in the U.S. retirement system have put increasing emphasis on DC accounts in lieu of the DB pensions. The share of older adults who received DB pension income through their own or other spouse's former employer dropped from 52 percent in the late 1990s and early 2000s to 43 percent in 2010, and will continue to decline in the coming years.²²

Figure 7: Retirement Account Ownership is Heavily Concentrated Among Higher-Income Households

Share of households owning retirement accounts by household income quartile, 2013



Source: Authors' analysis of 2013 SCF. Universe is households with heads age 25-64. Retirement account ownership status reported for 2013; income data reported for 2012. Those with negative earnings excluded. See Appendix for detailed methodology.

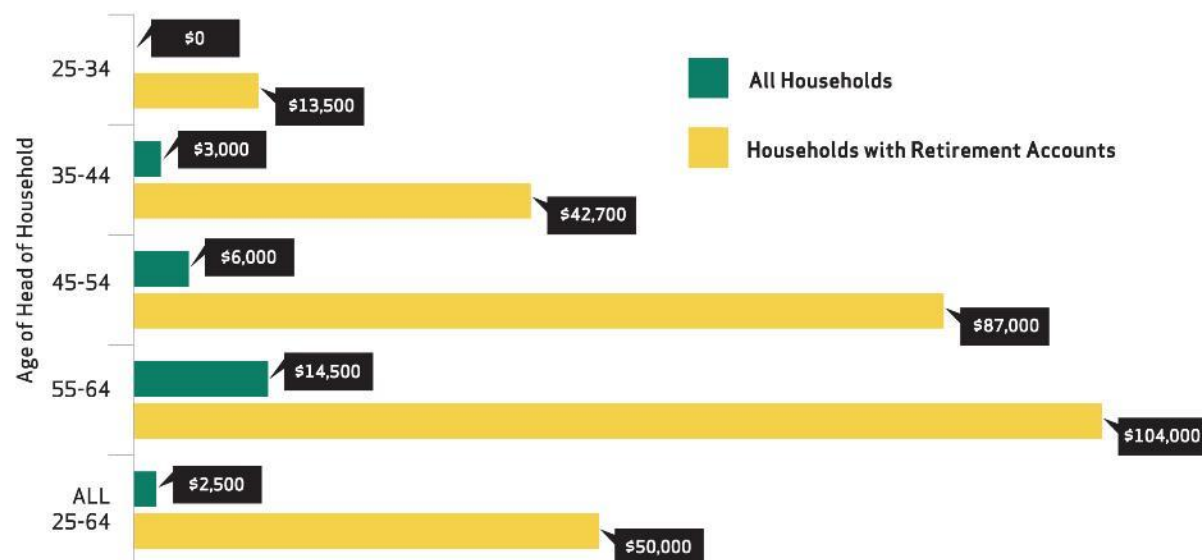
The shift from DB pensions to DC plans has had profound consequences for American workers and families in terms of the risks and costs they now bear in saving and investing to fund their own retirement. Unfortunately, the typical household—even one near retirement—has negligible retirement account assets. A large majority of working-age households have little retirement savings in relation to their income.

This section examines median retirement account balances for the entire population of working-age households with heads age 25-64 and analyzes retirement account assets in relation to income for working households, defined as those with earnings between \$5,000 and \$500,000, and total income below \$1 million.

Given that 45 percent of households do not own a retirement account, there is a large disparity between median (50th percentile) retirement asset balance figures counting only working-age households with retirement accounts, and those that count *all* working-age households (Figure 8). The median retirement account balance for households with retirement assets was \$50,000 in 2013, compared to \$2,500 for all households with heads age 25-64, compared to \$40,000 and \$3,000, respectively, in 2010 (unadjusted for inflation).

Figure 8: Typical Working-Age Household Has Only \$2,500 in Retirement Account Assets; Typical Near-Retirement Household Has Only \$14,500

Median retirement account balances, households with retirement accounts vs. contingent median account balance for all households, 2013



Source: Authors' analysis of 2013 SCF.

Even more significantly, among households approaching retirement (age 55-64), the median balance was \$104,000 for account-owning households and only \$14,500 for all households in that age group (Figure 8)—only a slight improvements from \$100,000 and \$12,000, respectively, in 2010. In other words, the average U.S. working-age household has virtually no retirement savings.

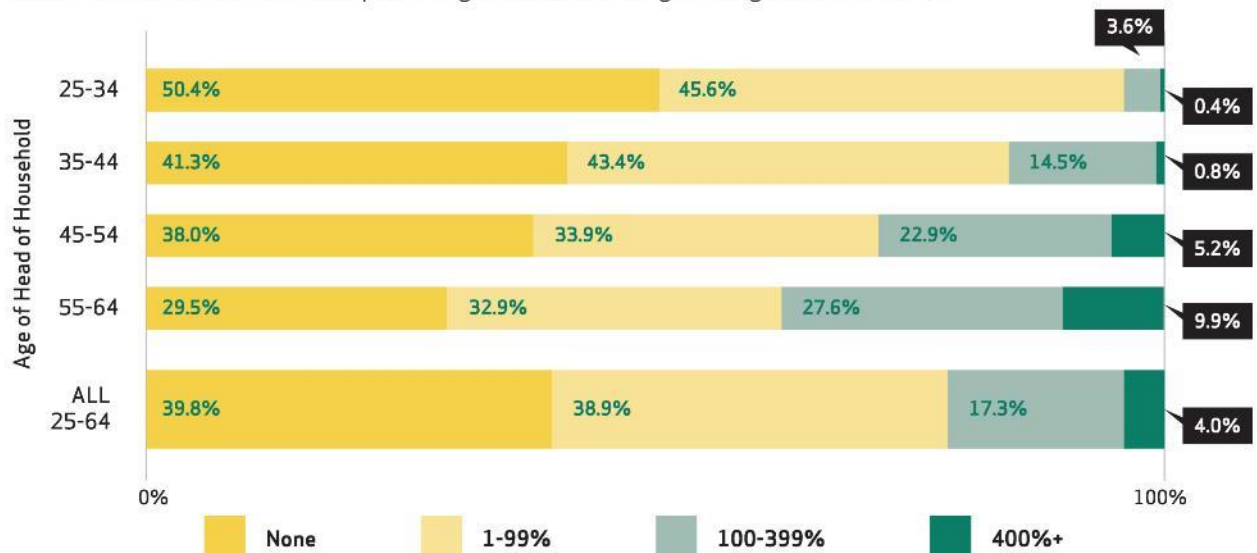
Even among households with retirement accounts, account balances are inadequate. For instance, take the 2013 median balance of \$104,000 for near-retirement households with a 401(k)-type account or IRA. This amount will only provide a few hundred dollars per month in income if the full account balance is annuitized, or if the household follows the traditionally recommended strategy of withdrawing 4 percent a year, which is risky in the current low-interest environment.²³

Another way to look at retirement savings is as a multiple of annual income. This provides a simple gauge with which to evaluate how well households are doing in preparing for retirement given their income level.

Figure 9 illustrates ratios of retirement account balances to household income among working-age households with at least one earner. Overall, some 40 percent of working households age 25-64 have no retirement savings. Another 39 percent have retirement savings less than 100 percent of income. Among working households age 55-64, nearly 30 percent have no retirement savings, and another 33 percent have retirement savings less than 100 percent of their income. That is, 79 percent of all working households age 25-64 and 62 percent of working households approaching retirement have less than their annual income saved in retirement accounts.

Figure 9: Nearly Four out of Five Working Households Have Retirement Savings Less than One Times Their Annual Income

Retirement account balance as a percentage of income among working households, 2013



Source: Authors' analysis of the 2013 SCF. Universe is households with heads age 25-64, with total earnings over \$5,000 and under \$500,000 and total incomes greater than zero and less than \$1 million.

Table 2 shows median ratios of retirement account balances and net worth to income, by age, for working households. The typical working household near retirement has less than one half the value of their annual income saved in a retirement account, and the typical young working household has no retirement savings. Further, the typical near-retirement working household has only about three times their annual income as their total net worth.

Table 2: Typical Near-Retirement Households Have Less than Half of their Annual Income Saved in a Retirement Account

Median ratio of retirement wealth among working households, by age group, 2013

MEDIAN RATIO	AGE OF HEAD OF HOUSEHOLD			
	25-34	35-44	45-54	55-64
Retirement Account Balance to Income	0.00	0.09	0.18	0.46
Net Worth to Income	0.37	0.85	1.77	3.08

Source: Authors' analysis of the 2013 SCF. Universe is households with heads age 25-64, with total earnings over \$5,000 and under \$500,000 and total incomes greater than zero and less than \$1 million.

In short, most working households are behind in saving for retirement—not only in terms of 401(k) and IRA balances, but in terms of their total household assets. The following section explores this gap in more detail.

iii. Falling Short by any Measure:

Working Households' Retirement Savings Gap

How much do households need to save in order to achieve retirement security? Most people do not have a clear idea of how much they need to save to have enough income—including Social Security—to maintain their standard of living in retirement. For instance, a \$200,000 retirement account balance may seem high, but is less than half of the minimum amount that a couple with \$60,000 in combined annual income will need, according to conservative estimates.

In order to determine how working households measure up to the standards suggested by some financial services experts as retirement savings goals, the following analysis compares net worth—total household assets minus household debt—to conservative retirement savings goals recommended by the financial services industry. Specifically, we used the age-specific savings benchmarks published by Fidelity Investments (see Table 3).²⁴

Table 3: Financial Industry Recommended Retirement Savings Targets

Recommended retirement savings targets as a ratio of income

Age	Savings Target as Multiple of Current Income	
	Fidelity (retire @ 67)	Aon Hewitt (retire @ 65)
25	0x	
30	.5x	
35	1x	
40	2x	
45	3x	
50	4x	
55	5x	
60	6x	
65	7x	11x
67	8x	

Source: Fidelity Investments 2012 and Aon Hewitt 2012. Both target 85% income replacement at retirement age.

We chose the Fidelity standards as a benchmark because, all things considered, they represent a conservative, lower-bound estimate of savings needs. To begin, we acknowledge that for low- and middle- income workers, the 85 percent income replacement target underlying these standards is somewhat in the high range among estimates of the share of pre-retirement income that needs to be replaced in order to maintain a household's standard of living. Nonetheless, there are several factors that make the 8 times income target conservative:

- It does not fully account for increased medical and long term care costs in retirement.
- The expected Fidelity retirement age of 67 is several years later than today's median retirement age, and we believe that a large share of workers—including older women who take up caring for aging parents—will not be able to keep working until that age. An earlier retirement age than 67 requires greater retirement savings to maintain one's standard of living. For instance, Aon Hewitt, a large human resources consulting firm, estimates that the average workers will need to save 11 times salary in retirement assets in order to retire at age 65.²⁵
- The savings target of 8 times income at age 67 is intended to last until 75th percentile life expectancy, which is somewhat short of the level recommended by most financial planners and leaves a one-in-four chance of running short of funds. In contrast, we define retirement income security in terms of the ability to maintain one's standard of living for as long as one lives—if not until maximum life expectancy, then at least the 85th or 90th percentile.

In addition, the measure that we chose to compare to the savings benchmarks—net worth—is a generous measure of retirement wealth, for three reasons. First, home equity accounts for a disproportionately large share of net worth—nearly 50 percent among near-retirees in the working households sample, and a greater share for the typical near-retiree household. While owning a home reduces housing costs, home equity is unlike financial wealth in that it is not easily converted into an income stream that can cover non-housing expenses. Second, net worth includes a variety of other financial and nonfinancial assets that are not intended to serve as a source of retirement income—e.g., college savings funds and Health Savings Accounts. Third, not all household assets will produce the level of returns that can be expected from a diversified portfolio held through a 401(k) or IRA. Thus in the following analysis, some assets are effectively over-valued in terms of their retirement income potential.

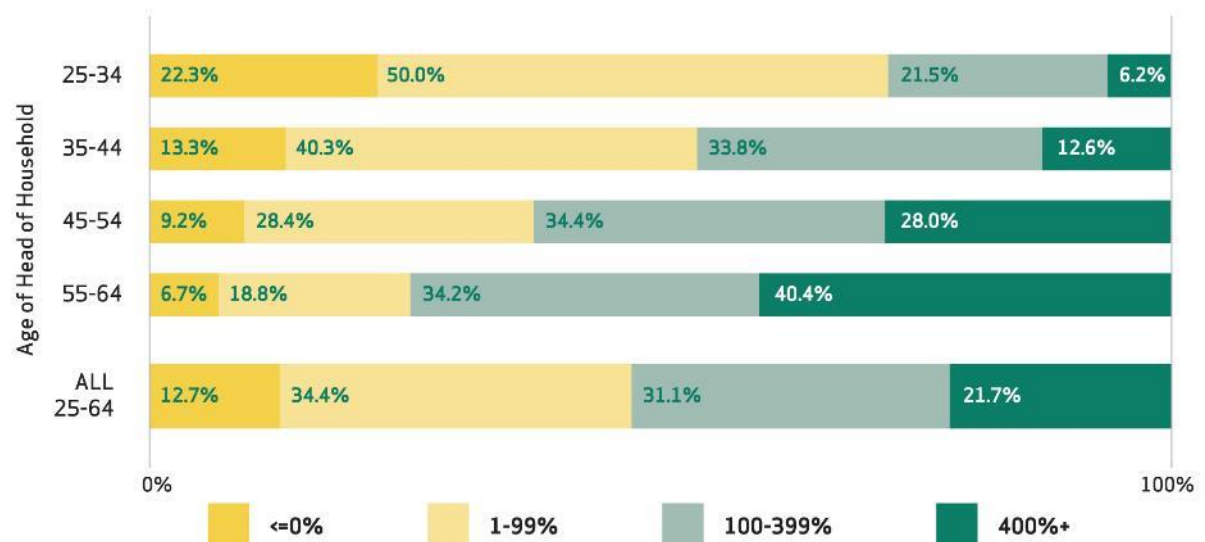
“Working households” in this analysis is defined as household with heads aged 25-64, earnings between \$5,000 and \$500,000 a year, and less than \$1 million total income. For this analysis, we calculated the percentage of working households in the 2013 SCF sample that met Fidelity savings benchmarks listed in Table 2. Each household’s net worth was compared to the savings requirements that resulted from applying the target multipliers to household income. For instance, the median retirement savings target for households age 55-64 was approximately \$322,000 and the mean was \$630,000. A more detailed description of the methodology can be found in the Appendix.

An important caveat is that the following estimates rely on rule-of-thumb multipliers and are not based on detailed projections of the income needs of individual households, which vary with family size, marital status, income level and tax rates, health care needs, actual Social Security benefits, and other factors. Such a simple analysis provides a transparent and easy to understand assessment of household retirement readiness in *aggregate* terms, and thus are broadly suggestive rather than definitive. Nonetheless, the sensitivity analysis presented at the end of this section confirms that significantly lowering the savings bar for low-income households—which can expect higher income replacement from Social Security—makes little difference in the findings.

As a context for the retirement savings target comparison, Figure 10 illustrates the ratio of net worth to income among working households by age group. In 2013, nearly half (47.2 percent) of near-retiree households with at least one earner, and over one-third (37.6 percent) of households age 45-54 had net worth that was less than their annual income. Only two out of five households near retirement had net worth exceeding four times their annual income. Indeed, as Table 2 in the Section III showed, the typical near-retiree working household had net worth equal to about three times annual income—half the retirement savings level of 6 times income recommended by the savings benchmark for age 60. Among households age 45-54, the median ratio of net worth to income was only 1.77 in 2013—far short of the target of 4 times income by age 50.

Figure 10: Nearly Half of Working Households Age 25-64 Have Net Worth Less than Annual Income

Ratio of net worth to income among working households, 2013



Source: Authors' analysis of the 2013 SCF. Universe is households with heads age 25-64, with total earnings over \$5,000 and under \$500,000 and total incomes greater than zero and less than \$1 million.

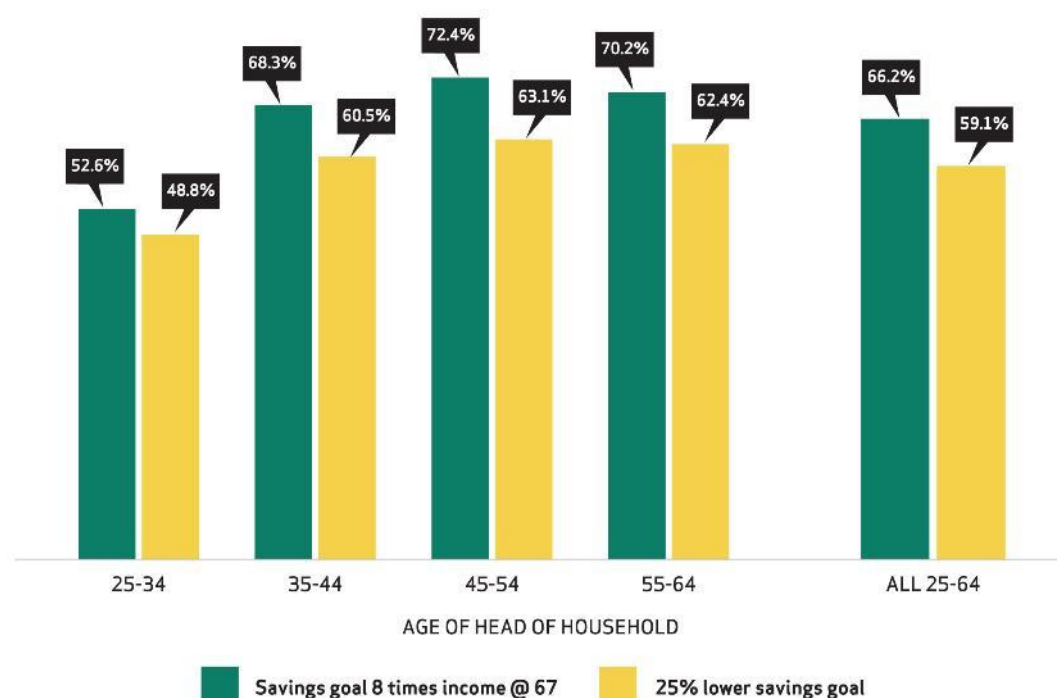
Given the low level of household net worth relative to income, even among households nearing retirement age, it is no surprise that a large majority of working households age 25-64 fall short of financial industry recommended retirement savings targets. Figure 11 shows the share of working households in each age group that did not meet savings targets in 2013. Results are shown for the baseline benchmarks targeting 8 times income by age 67, and a substantially reduced target of 6 times income by age 67. We will first discuss results for the baseline savings benchmark. Two-thirds (66 percent) of working households age 25-64 did

not meet savings levels targeting 8 times income by age 67. This is comparable to the finding of 65 percent falling short in the previous study based on 2010 data. Among near-retiree households, a large majority (70 percent) did not meet this target. A similar share (72 percent) of households age 45-54 also fell short.

Figure 11:

A Large Majority of Working Households Have Insufficient Retirement Wealth

Share of working households with net worth below retirement savings target, by age group, 2013



Source: Authors' analysis of 2013 SCF based on retirement savings targets adapted from Fidelity (2012). Universe is households with heads age 25-64, with total earnings \geq \$5,000 and $<$ \$500,000 and total income $<$ \$1M. See methodology in Appendix.

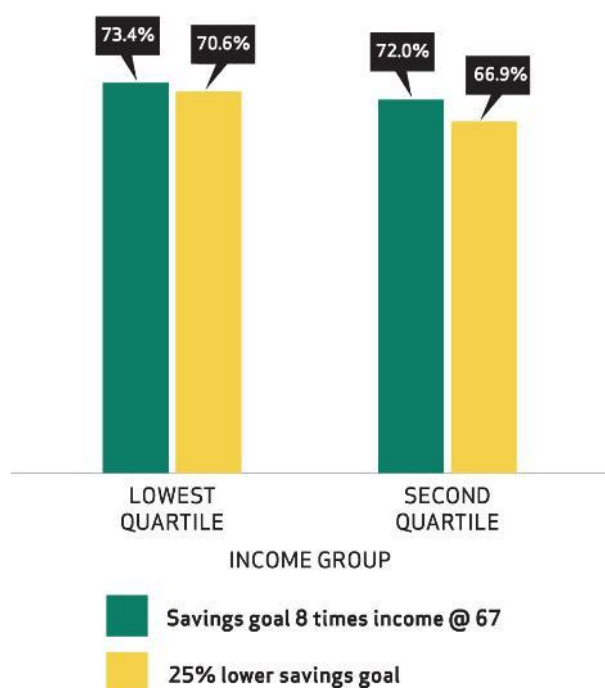
Readers should be cautious in interpreting the results for the youngest age cohort. A much larger share meet the retirement savings targets and thus appear to be doing much better than older generations, but this is largely an artifact of the way the savings trajectory is modeled by Fidelity. Expected contribution rates are much lower for this group, and the overall savings balance requirements are disproportionately lower than those for the older age groups after controlling for compound interest. Indeed, the compound interest assumptions in the Fidelity standards, combined with the use of the net worth measure, are generally favorable to the younger age cohorts. Other studies that incorporate detailed retirement income models, including those of the Center for Retirement Research (CRR) and the Employee Benefit Research Institute (EBRI), tend not to examine households under age 30. Analysis by CRR indicates that younger age cohorts are deemed at greater risk of experiencing a retirement income shortfall than older age cohorts.

Reducing the savings goal by 25 percent, to only 6 times income by age 67, produces somewhat improved but still discouraging results. Three out of five households (59 percent) in the sample did not meet the reduced savings goal in 2013. For the top 50 percent of households, this level of retirement savings would mean reducing standard of living expectations in retirement. But what about the bottom 50 percent of households?

A typical low-wage worker will have a higher percentage of her pre-retirement income replaced by Social Security compared to a middle-wage worker—approximately 15 percentage points higher, depending on the data source. This gain is partially offset by the fact that she will also need to replace a greater share of her income in retirement.²⁶ The costs that decrease or disappear in retirement—income taxes, savings, and work related expenses—take up a smaller share of a typical low-wage worker’s pay.²⁷ Whatever the case, it turns out adjusting the savings benchmark makes little difference to low- or even low-moderate income households.

Figure 12: Reducing the Benchmark Does Little to Improve Retirement Outlook for Lower Income Families

Share of households that do not meet retirement savings target based on net worth, bottom 50%, 2013



Source: Authors' analysis of 2013 SCF based on retirement savings targets adapted from Fidelity (2012). Universe is households with heads age 25-64, with total earnings \geq \$5,000 and $<$ \$500,000 and total income $<$ \$1M. Household income adjusted by marital status for ranking purposes. See methodology in Appendix.

As Figure 12 shows, a 25 percent reduction in the savings target increases the share of low-income households meeting the target by less than 3 percentage points, from 73.4 percent to 70.6 percent. Most low-income households (those in the bottom 25 percent) are so asset-poor—so far short of any reasonable retirement savings target—that moving the bar upwards or downwards makes little difference. The same reduction in the savings target reduces the share of the low-to-middle income households (the second lowest 25 percent) falling from 72 percent to 67 percent, or 5 percentage points—again a negligible difference.

The findings in this section echo those of academic and industry studies. The National Retirement Risk Index from the Center for Retirement Research indicates that the share of U.S. households age 30-64 at risk of being unable to maintain their standard of living in retirement increased from 44 percent in 2007 to 53 percent in 2010 and 2013.²⁸ This estimate does not account for long term care costs, which the Center previously projected would increase the share of households at retirement risk by 16 percentage points.²⁹ In addition, EBRI's 2012 Retirement Security Projection Model estimates that approximately 41 percent of early Baby Boomers and 43 percent of late Baby Boomers and Generation Xers are at risk of having insufficient income to meet basic expenses in retirement based on current average expenditures for age and income.³⁰

A study by Aon Hewitt based on 2.2 million employees at 78 large companies projects that full-career employees "who currently contribute to their employers' savings plans and who retire at age 65 . . . will, on average, accumulate retirement resources of 8.8 times their pay" counting DB pensions and DC accounts.³¹ This is 20 percent short of Aon Hewitt's goal of 11 times pay, albeit 10 percent in excess of the goal set by Fidelity assuming a retirement age of 67 instead of 65. However, when *all* employees are included in the Aon Hewitt projection, including mid-career hires and those who do not contribute to their DC plans, the average private asset shortfall is 5.3 times pay. Ultimately, only 15 percent of employees in that study are projected to have sufficient retirement income at age 65.

These troubling numbers are consistent with overall trends in an economic recovery in which overall wealth has remained stagnant, and income and wealth at the bottom have dropped for most groups, especially those at the bottom. Net worth for the typical household dropped precipitously between 2007 and 2010, and then declined still further.³² Indeed, the clearest sign of declining retirement income security is the fact that ratios of household net worth to income by age group have remained relatively flat over the past couple of decades, while Social Security and pension benefit cuts combined with longer life expectancy require greater personal savings just to keep up.³³

iv. Policy Implications

With declining workplace retirement plan coverage and fewer workers covered by secure pensions, Americans face a retirement savings burden that is heavier than ever. Unfortunately, the findings of this study clearly indicate that most households—especially middle- and low-income—are not meeting this burden. Nearly 45 percent U.S. working-age households (40 million) do not have a retirement account, whether in or out of the workplace. Most are in the bottom half of the income distribution. The typical working-age household has only \$2,500 in retirement savings. Among households with at least one earner, nearly 4 out of 5 have retirement savings less than their annual income. While experts recommend that people build a nest egg that is at least 8 to 11 times income in order to maintain their standard of living in retirement and some estimate that a contribution rate of 15 percent over a full career is necessary to meet this goal, a large majority of working households fail to meet conservative benchmarks modeled on the assumption that people will work longer, until age 67.

This analysis clearly indicates the significant challenges facing baby boomers and upcoming generations of working families when it comes to retirement security. Clearly, more households need to increase their retirement contributions, to the extent that they are able to do so. Even so, the magnitude of the retirement savings gap is such that most people will have to work longer if they are able to stay employed, or experience a significant decline in their standard of living when they retire.

It is highly unlikely that most individuals and households will be able to fill such a large retirement income gap by themselves. They also need employers to become more engaged in assuring the retirement readiness of the workforce. In addition, public policy can play a critical role in putting all Americans on a path toward a secure retirement.

Specifically, the findings of this study have policy implications in three critical areas: 1) strengthening Social Security, 2) expanding access to low-cost, high quality retirement plans, especially DB plans, and 3) helping low-income workers and families save for retirement.

Strengthening Social Security

The majority of workers and families rely on Social Security for a significant share of their retirement income. Currently, Social Security and Supplement Security Income (SSI) together account for over 90 percent of income for the bottom 25 percent of retirees. For the middle 50 percent, Social Security accounts for approximately 70 percent of income.³⁴ According to Supplemental Poverty Measure data released by the U.S. Census Bureau, which takes into account senior medical expenses, senior poverty was 15 percent in 2011—significantly higher than the 8.7 percent reported under the standard poverty measure.³⁵ Cuts to future Social Security benefits will likely increase elder poverty.

The Social Security system faces challenges stemming from an aging population that, while significant, are manageable. Primarily a pay-as-you-go system, benefits are funded through payroll taxes as well as the Social Security (Old Age and Survivors Insurance, or OASI) Trust Fund. The trust fund is projected to become depleted by 2033, after which payroll taxes will cover approximately three-quarters of promised benefits through 2087. The actuarial deficit for the next 75 years is 2.88 percent of Social Security taxable payroll, which is capped at \$118,500 per worker in 2015.³⁶

Given highly deficient household-level retirement savings, strengthening Social Security—a system on which all Americans rely—is critical to the foundation of retirement security. While current political debate about the program is often focused on benefit cuts—e.g., increasing the full retirement age and reducing Cost of Living Adjustments (COLAs)—a study by the National Academy of Social Insurance found strong public support for maintaining and expanding Social Security benefits as well as for increasing system revenues in order to preserve the system.³⁷

The challenges faced by vulnerable populations have spurred calls to expand benefits. One proposal calls for increasing minimum benefits for lifetime low-wage earners,³⁸ while another addresses the special challenges women face in their role as caregivers that result in fewer years in the labor force.³⁹ Several proposals to integrate the above elements, and more, into a broader package of reforms intended to strengthen and modernize Social Security have been advanced by former U.S. Senator Tom Harkin, the Economic Policy Institute, the Center for American Progress, and others.⁴⁰ These broad proposals share a common focus on increasing revenues by eliminating the payroll tax cap; increasing benefits for low-wage workers,

survivors, and caregivers; and adjusting the benefit formula in order to better keep pace with living costs faced by seniors and to prevent seniors from falling into poverty at advanced ages.

Improving Low- and Middle-Income Workers' Access to Low-Cost, High Quality Retirement Plans

Aside from Social Security, employer-sponsored plans are the most important vehicle for retirement security among workers and families. At the same time, the employer-sponsored system is purely voluntary, both on the part of the employer and the employee. This system seems to best serve workers and families with higher incomes, who enjoy high rates of access to workplace retirement plans. However, a large share of workers—mostly low- and middle-wage workers and small businesses employees—are being left out. Automatic enrollment, which is standard for DB pensions, is becoming increasingly common as a recommended practice for 401(k) plans,⁴¹ and is bridging a part of the participation gap within firms that offer a retirement plan. However, small employers have less incentive and/or capacity to offer a plan.

In theory, workers without access to a workplace plan can utilize retail IRAs. However, the vast majority of IRA contributions are rollovers from employer plans like 401(k)s.⁴² Three-quarters of participants in IRAs and Keogh plans for self-employed workers are from the top half of the income distribution.⁴³ Retail IRAs lack the critical payroll deduction feature that participants in employer plans enjoy. And while 401(k) plans typically entail higher fees and lower returns than DB pensions, retail IRAs generally carry even higher fees and lower returns.⁴⁴

To begin, Congress could enact policies to make it easier for private employers to sponsor DB pensions, which have been under stress partly because of regulatory changes enacted in 2006.⁴⁵ Changes to make funding requirements more predictable—such as the restoration of smoothed interest rates—would reduce funding volatility, thus making private sector DB pensions more sustainable.⁴⁶ New plan designs, such as the Adjustable Pension Plan (APP), which uses conservative asset allocations and plan assumptions, coupled with the ability to adjust prospective benefits, should be more attractive to employers, as the design allows for much more predictability in contribution rates.

Citing low coverage of low- and middle-income workers and families, some policy experts have advanced a number of proposals at the national level to move toward more universal retirement plan coverage.⁴⁷ These proposals aim to provide an additional layer of stable retirement income in the absence of traditional pensions. Most proposals feature automatic enrollment, payroll deduction, full portability, and low-cost professional investment management. The Auto IRA concept has support from the Obama administration, and one version has been introduced in Congress by U.S. Representative Richard Neal.⁴⁸ Basic provisions include requiring employers that do not offer their own plan to automatically enroll workers in an IRA and deduct a default contribution rate from paychecks, while allowing employees to individually opt out. While most Auto IRA proposals leave investment risk and funding responsibility to individuals, other proposals feature risk sharing and other pension-like benefits in order to provide an additional layer of secure income to supplement Social Security and private savings.⁴⁹

Meanwhile, efforts to expand retirement plan coverage are gaining momentum at the state level, based on growing concern among legislators and stakeholders that generations of workers might retire into economic hardship. In January 2015, Illinois passed SB2758, creating the Secure Choice Savings Program.⁵⁰ It is an Auto-IRA program with pooled, professional investment management that will cover workers who lack access to a workplace plan. Employers with 25 or more employees must auto-enroll their employees at a 3 percent contribution rate, with the option to opt out. Investment and administrative fees are capped at 0.75 percent of assets. This plan, scheduled to go into effect in 2017, is similar to a plan passed in 2012 in California. However, California is still in the process of commissioning a privately-funded study of program design, market analysis, and financial feasibility. Nearly 20 states considered or are considering similar proposals.⁵¹ However, state-level policy debates about broadly expanding coverage pose questions about subjecting employers to fiduciary liability involve uncertainty.⁵² Greater regulatory clarity and flexibility would assist those states that want to address the pressing retirement savings crisis.

According to a NIRS public opinion survey, 71 percent of respondents support a possible state retirement solution that offers portability, professional investment management, and secure monthly income.⁵³

Helping Low-Income Households Save

Real wages have remained stagnant over the past several decades, lagging behind productivity growth, and this has made it difficult for low-income households to save. The primary way the federal government supports retirement savings is through the income tax deduction for retirement contributions. However, 70 percent of the tax subsidies for contributions to 401(k) type accounts and IRAs are claimed by the top one-fifth of households by income.⁵⁴ Because lower-income households have low marginal income tax rates, they have little incentive to save from the existing tax deduction. Low-wage workers are also less likely to receive an employer match, even if they do have access to an employer-sponsored DC plan.

In response to this situation, the federal government enacted the Saver's Credit in 2001 for lower-income households, which reduces income tax liability by 10-50 percent of the first \$2,000 in contributions to a qualified retirement account, depending on income and tax filing status. For single filers in the 2015 tax year, a credit of 50 percent is available for individuals with incomes up to \$18,250 AGI (Adjusted Gross Income), 20 percent for AGI between \$18,251 and \$19,750, and 10 percent for AGI between \$19,751 and \$30,500. The rapid phase-out at a low income level and lack of refundability limit the credit's effectiveness.⁵⁵ The average credit in 2006 was only \$172.⁵⁶

Expanding the Saver's Credit by increasing income limits and credit rates and making the credit refundable would increase incentives for lower-income families to save for retirement and increase their account balances. State-sponsored retirement savings programs, if implemented, could educate members about the Saver's Credit. In addition, creating a system for depositing the credit directly into retirement savings accounts would help bolster account accumulations.

2. Key Findings

1. Account ownership rates are closely correlated with income and wealth. Nearly 40 million working-age households (45 percent) do not own any retirement account assets, whether in an employer-sponsored 401(k) type plan or an IRA. Households that do own retirement accounts have more than 2.4 times the annual income of households that do not own a retirement account.

2. The average working household has virtually no retirement savings. When all households are included—not just households with retirement accounts—the median retirement account balance is \$2,500 for all working-age households and \$14,500 for near-retirement households. Furthermore, 62 percent of working households age 55-64 have retirement savings less than one times their annual income, which is far below what they will need to maintain their standard of living in retirement.
3. Even after counting households' entire net worth—a generous measure of retirement savings—two-thirds (66 percent) of working families fall short of conservative retirement savings targets for their age and income based on working until age 67. Due to a long-term trend toward income and wealth inequality that only worsened during the recent economic recovery, a large majority of the bottom half of working households cannot meet even a substantially reduced savings target.
4. Public policy can play a critical role in putting all Americans on a path toward a secure retirement by strengthening Social Security, expanding access to low-cost, high quality retirement plans, and helping low-income workers and families save. Social Security, the primary edifice of retirement income security, could be strengthened to stabilize system financing and enhance benefits for vulnerable populations. Access to workplace retirement plans could be expanded by making it easier for private employers to sponsor DB pensions, while national and state level proposals aim to ensure universal retirement plan coverage. Finally, expanding the Saver's Credit and making it refundable could help boost the retirement savings of lower-income families.

3. Conclusion

The hope of retirement security is out of reach for many Americans in the face of a crumbling retirement infrastructure. Secure pensions that last through retirement have been replaced with volatile individual accounts, which were intended to supplement DB pension plans. The average American family has virtually no retirement savings, with a median retirement account balance of \$2,500. Among working-age families with at least one earner, nearly 4 out of 5 do not have retirement savings that at least equal their annual income. Two out of three working families have household net worth that falls short of recommended savings targets.

The heart of the issue consists of two problems: lack of access to retirement plans in and out of the workplace—particularly among low-income workers and families—and low retirement savings. These twin challenges amount to a severe retirement crisis that, if unaddressed, will result in grave consequences for the U.S. In the coming decades, the continued decline in the share of older households receiving DB pension income—a factor linked to reduced reliance on public programs⁵⁷—combined with inadequate retirement savings, is likely to generate increasing demand for public assistance. An increasingly dependent elder population will likely place increased strain on families and social service organizations. The “American Dream” of retiring after a lifetime of work will be long delayed, if not impossible, for many.

How can the U.S. begin to address this retirement crisis? Policy action is warranted in three key areas. The first is to strengthen Social Security, the primary edifice of retirement income security for low- and middle-income Americans. The second is to expand low- and middle-wage workers’ access to high-quality, low-cost retirement plans with professional investment management, risk pooling, and lifetime payouts. In addition to making it easier for private employers to sponsor DB pensions, national and state level proposals to ensure universal retirement plan coverage could fill the wide gap in the employer-based system. Third, an expanded, refundable Saver’s Credit could help boost the retirement savings of families struggling with stagnant wages.

If the U.S. were to be given a grade for its retirement readiness today, it would be “Needs Improvement.” American workers, employers, and policymakers need to look closely at what we need to do individually and collectively, so that everyone can build sufficient assets to have adequate and secure income after a lifetime of work. Acting sooner rather than later will greatly improve our future retirement security.

4. Appendix: Methodology

About the Survey of Consumer Finances (SCF)

The SCF, sponsored by the U.S. Federal Reserve, is a triennial household survey that captures detailed data on family finances including debt, assets (including retirement account balances), and income. The sample is designed to be representative of the general population. In addition, families with high incomes and assets are over-sampled in light of the concentration of wealth. For the 2013 survey, 6,026 families were questioned, but the public

dataset contains five records for each family, or PEU (primary economic unit), resulting in a total of over 30,000 records. The SCF defines the PEU as “the economically dominant single person or couple (whether married or living together as partners)” and all other persons who share the same residence and who are financially interdependent upon them.⁵⁸ In this report, “families” and “households” both refer to PEUs in the SCF.

All estimates were calculated using the sample weight (WGT).

Household Level Employer-Sponsored Retirement Plan Coverage

There are three variables in the SCF summary file related to retirement plan coverage through a current job held by the respondent and/or their spouse:

- DBPLANCJ — “Either head or spouse/partner has a defined benefit pension on a current job”
- BPLANCJ – “Either head or spouse/partner has both types of pension plan on a current job”
- DCPLANCJ – “Either head or spouse/partner has any type of account-based plan on a current job”

Households were determined to have current job-based coverage if the DBPLANCJ or DCPLANCJ values were “yes.” In the previous version of this report based on the 2010 SCF, we used a slightly different methodology to determine DC plan participation because DCPLANCJ was not available then in the public summary file downloaded by the author. As a proxy, we used THRIFT (“Total value of account-type pension plans from R and spouse’s current job”) value greater than zero to identify DC plan participation through a current job. We also included households that answered “yes” to BPLANCJ but did not report an account balance under THRIFT. This left out households only had a DC plan and did not report an account balance. As a result, the previous report slightly under-estimated the share of households with DC coverage, and slightly over-estimated the share of households with DB coverage in relation to the universe of households with any type of current workplace retirement plan.

Retirement Account Ownership and Balances

The SCF contains a key summary variable, RETQLIQ, which is the sum of quasi-liquid retirement assets in account-based pensions and retirement plans held by the head and/or spouse. These consist of:

- Employer-sponsored plans including 401(k)s, SEP-IRAs, Simple IRAs, and other account based retirement plans
- From previous jobs, and from which income is currently being drawn (CURRPEN)
- From previous jobs, from which income is not yet being drawn (FUTPEN)
- From a current job (THRIFT)
- IRAs (including traditional and Roth), and Keogh plans for small businesses (IRAKH)

A household was determined to have a retirement account if their RETQLIQ value was greater than zero and not to have an account if the value was zero. In determining retirement ownership rates by income group, we adjusted household income by marital status with the goal of accounting for differences in the cost of living between couples and singles. This is because a couple needs somewhat less than twice the income of a single person in order to reach the same standard of living. If the household head's marital status was single—not living with a spouse or partner—the income value remained the same. If the household head was married or living with a partner, then the household's income was divided by the square root of two. The resulting values were ranked in order to group households into income quartiles.

Target Retirement Savings

Table A1 below details the multipliers applied to each household, based on the age of the head, in order to calculate the amount that it would need to have saved in order to meet Fidelity's recommended retirement savings benchmarks. Each household's reported annual income for 2012 was multiplied by the factors from Table A1 to arrive at dollar values for target retirement savings. We chose to use income rather than earnings for this calculation because there is a steep drop-off in median earnings between the 45-54 and 55-64 age

cohorts, as workers reduce work hours or exit the labor market for a variety of reasons related to health status, elder care demands, and both voluntary and involuntary retirement. At the same time, the latter age group's median income is slightly higher than the former's median income. Using only earnings to calculate retirement savings targets would unduly lower retirement consumption standards for near-retirement workers relative to the mid-career cohort, while using total income keeps retirement consumption standards similar.

Table A1.
Target Retirement Savings Multipliers

Age of Head of Household	Multiplier (Ratio to Income)	Age of Head of Household	Multiplier (Ratio to Income)
25	0.00	53-57	5.00
26	0.06	58-62	6.00
27	0.15	63	6.75
28-32	0.50	64	7.00
33-37	1.00	65	7.40
38-42	2.00	66	7.70
43-47	3.00	67	8.00
48-52	4.00		

Source: Author's adaption of target retirement savings benchmarks from Fidelity 2012.

The resulting target retirement savings level for each household was compared to that household's net worth (NETWORTH). Finally, in order to determine whether each household was on track to meet a significantly reduced savings target of 6 times income at age 67, we calculated whether that household met 75 percent of the age specific savings level outlined in table A1.

5. References

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- 4 Miller, Madland, & Weller, op cit.
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 - 7 The limit for tax-deductible contributions to traditional IRAs in 2015 is \$5,500, with additional catch-up contributions up to \$1,000 allowed for individuals age 50 and older. The same limits apply to Roth IRAs, which are funded on an after-tax basis. 401(k) contributions in 2015 are capped at \$18,000, with additional catch-up contributions of up to \$6,000. SEP-IRAs and Simple IRAs for small businesses and sole proprietors have much larger contribution limits.
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 - 9 Weller found that in fact, households have not saved adequately to offset increased risk. C. Weller, 2010, "Did Retirees Save Enough to Compensate for the Increase in Individual Risk Exposure?," *Journal of Aging & Social Policy* v22n2, pp. 152-171. Similarly, Watson Wyatt found "no evidence" that households that had only a DC plan accumulate more retirement account assets than households with a DB plan. Watson Wyatt Worldwide, 2009 (Aug.), "Retirement Prospects Dim for Many Retirees," *Insider*, Watson Wyatt Worldwide, <http://www.watsonwyatt.com/us/pubs/insider/showarticle.asp?ArticleID=21895>.
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 - 16 Notably, between 2010 and 2013, worker-level retirement plan access and coverage as reflected in CPS data increased, but household-level participation rates drawn from the SCF continued to decline. This might be an artifact of differences in survey methodology. For instance, CPS data on retirement plan coverage refers to the longest

- job held during the previous calendar year. In contrast, the SCF asks about the current job at the time of the interview. Because the SCF interviews take place early in the year, the 2013 SCF data may correlate more closely with CPS data for 2012, when retirement plan access rates were still lower than for 2010.
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 - 18 The key SCF variable, total quasi-liquid retirement assets, includes only "account-type" pensions in which benefits are paid as a lump sum rather than as an annuity. It is unclear the extent to which assets from cash balance plans—a type of DB pension in which the benefit is expressed as a nominal account balance and which can be paid as an annuity and/or as a lump sum, depending on the plan—were coded as account-type pensions.
 - 19 Author's method is consistent with Federal Reserve tabulations of the shares of households "with retirement accounts" in J. Bricker, L.J. Dettling, A. Henriques, J.W. Hsu, K.B. Moore, J. Sabelhaus, J. Thompson, and R.A. Windle, 2014 (Sep.), "Changes in U.S. Family Finances from 2010 to 2013: Evidence from the Survey of Consumer Finances," Federal Reserve Bulletin v100n4, pp. 1-80.
 - 20 Author's findings for age groups 35-44, 45-54, and 55-64 are identical to tabulations previously published by the Federal Reserve in Bricker et al., op cit. The Federal Reserve has not published data specifically for age groups 25-34 or 25-64.
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 - 22 According to an analysis of the Survey on Income and Program Participation, 52 percent of Americans age 60 and over had DB pension income in 1998 and 2003. The rate dropped to 48 percent in 2006 and 43 percent in 2010. F. Porell and D. Oakley, 2012 (Jul.), "The Pension Factor 2012: The Role of Defined Benefit Pensions in Reducing Elder Economic Hardships," National Institute on Retirement Security, Washington, DC.
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 - 25 Aon Hewitt 2012, op cit., p. 10. Assumptions include career start at age 25; 50th percentile life expectancy; 7.0 percent rate of return on assets before retirement and 5.5 percent after retirement; 3 percent inflation; and 4 percent wage growth.
 - 26 See A.H. Munnell, A. Webb, and L. Delorme, 2006 (Jun.), "A New National Retirement Risk Index," Issue Brief No. 48, Center for Retirement Research at Boston College, Chestnut Hill, MA; Aon Consulting, 2008, "2008 Replacement Ratio Study," Aon Consulting, <http://www.aon.com/about-aon/intellectual-capital/attachments/human-capital-consulting/RRStudy070308.pdf>.
 - 27 For instance, low-income individuals' tax burden tends to be more heavily weighted toward state and local sales taxes which do not decline after retirement, and less toward income taxes which do tend to decline; they also spend less on work related expenses.
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